

Abstract of the Disclosure

The present disclosure relates to a method for fabricating an image sensor capable of improving dark current characteristics. The method includes: forming sequentially a pad oxide layer and a pad nitride layer on a substrate and selectively removing a portion of the pad oxide layer and a first portion of the pad nitride layer to expose a surface of the substrate on which a field insulation layer will be formed; forming a first ion-implantation region by performing a first ion-implantation process on the exposed surface of the substrate using the remaining pad nitride layer that exists after removal of the first portion of the pad nitride layer as a first mask; performing a thermal oxidation process to form the field insulation layer on the exposed surface of the substrate; removing a second portion of the pad nitride layer so that a side of the remaining pad nitride layer that exists after removal of the second portion of the pad nitride layer is spaced apart from an edge of the field insulation layer by a distance; and forming a second ion-implantation region by performing a second ion-implantation process on the field insulation layer using the remaining pad nitride layer that exists after removal of the second portion of the pad nitride layer as a second mask.